

CLAIMS

We claim:

1. A method of operating at least one spray unit for thermally managing at least one electronic device, said method comprising the steps of:

measuring a device temperature of at least one electronic device; and

adjusting a spraying distance between said at least one electronic device and at one spray unit based upon said device temperature of said at least one electronic device to provide a desired thermal management of said at least one electronic device.

2. The method of operating at least one spray unit of Claim 1, wherein said adjusting a spray distance includes decreasing said spraying distance if said temperature of said at least one electronic device is higher than a desired level.

3. The method of operating at least one spray unit of Claim 1, wherein said adjusting a spray distance includes increasing said spraying distance if said temperature of said at least one electronic device is lower than a desired level.

4. The method of operating at least one spray unit of Claim 1, wherein said at one spray unit has a spray pattern that is adjustable and wherein if said device temperature is greater than a desired level, said spray pattern is adjusted for increasing cooling of said at least one electronic device.

5. The method of operating at least one spray unit of Claim 1, wherein said at least one spray unit has a spray pattern that is adjustable and wherein if said device temperature is less than a desired level, said spray pattern is adjusted for decreasing soiling of said at least one electronic device.

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2 6. A method of operating at least one spray unit for thermally managing at least
3 one electronic device, said at least one spray unit comprising a first portion and a
4 second portion movably positioned with respect to said first portion, said method
5 comprising the steps of:

6 measuring a device temperature of at least one electronic device; and

7 adjusting a spraying distance between said at least one electronic device and
8 said second portion based upon said device temperature of said at least one electronic
9 device to provide a desired thermal management of said at least one electronic device.

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11 7. The method of operating at least one spray unit of Claim 6, wherein said
12 step of adjusting a spray distance includes decreasing said spraying distance if said
13 device temperature of said at least one electronic device is higher than a desired level.

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15 8. The method of operating at least one spray unit of Claim 6, wherein said
16 step of adjusting a spray distance includes increasing said spraying distance if said
17 device temperature of said at least one electronic device is lower than a desired level.

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19 9. The method of operating at least one spray unit of Claim 6, wherein said at
20 least one spray unit has a spray pattern that is adjustable and wherein if said device
21 temperature is greater than a desired level, said spray pattern is adjusted for increasing
22 the cooling of said at least one electronic device.

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24 10. The method of operating at least one spray unit of Claim 6, wherein said at
25 least one spray unit has a spray pattern that is adjustable and wherein if said device
26 temperature is less than a desired level, said spray pattern is adjusted for decreasing
27 the cooling of said at least one electronic device.

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29 11. The method of operating at least one spray unit of Claim 6, wherein said
30 first portion has a constant distance from said at least one electronic device.

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2 12. A method of operating at least one spray unit for thermally managing at
3 least one electronic device, said method comprising the steps of:
4 measuring a device temperature of at least one electronic device; and
5 adjusting a spraying distance between said at least one electronic device and at least
6 one spray unit.

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8 13. The method of operating at least one spray unit of Claim 12, wherein said
9 step of adjusting a spray distance includes decreasing said spraying distance if said
10 device temperature of said at least one electronic device is higher than a desired level.

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12 14. The method of operating at least one spray unit of Claim 12, wherein said
13 step of adjusting a spray distance includes increasing said spraying distance if said
14 device temperature of said at least one electronic device is lower than a desired level.

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16 15. The method of operating at least one spray unit of Claim 12, wherein said
17 at least one spray unit has a spray pattern that is adjustable and wherein if said device
18 temperature is greater than a desired level, said spray pattern is adjusted for increasing
19 the cooling of said at least one electronic device.

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21 16. The method of operating at least one spray unit of Claim 12, wherein said
22 at least one spray unit has a spray pattern that is adjustable and wherein if said device
23 temperature is less than a desired level, said spray pattern is adjusted for decreasing
24 the cooling of said at least one electronic device.

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26 17. The method of operating at least one spray unit of Claim 12, wherein said
27 first portion has a constant distance from said at least one electronic device.

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